



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,243	02/17/2004	Florian Kehrer		9665

7590 10/18/2006

Francis C. Hand, Esq.
c/o Carella, Byrne, Bain, Gilfillan,
Cecchi, Stewart & Olstein
5 Becker Farm Road
Roseland, NJ 07068

EXAMINER

BUSHEY, CHARLES S

ART UNIT PAPER NUMBER

1724

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,243

Applicant(s)

KEHRER, FLORIAN

Examiner

Scott Bushey

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3, 11, 12, 14 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-8, 10, 13, 15-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 5, 8, 10, 15-17, and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Acker et al (Figs. 1 and 7; col. 1, lines 9-10; col. 4, lines 3-26).

Applicant should note that Acker et al clearly discloses one or more channels (44) having apertures (46) for the outflow of a plurality of liquid streams. Below the channels are guide means (52 in Fig. 7), which pass through gutter means (14) having a tapering region and a gap, which throttles liquid flow through the distributor. The guide means includes spaced apart drip points at the lower edge thereof (see Fig. 7), which uniformly distribute liquid that gathers within the gutter to provide a hydrodynamic balance. Note col. 4, lines 15-20.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 6, 7, 13, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acker et al.

Acker et al, as applied above substantially disclose applicant's invention as recited by instant claims 2, 6, 7, 13, and 18, except for the parallel arrangement of the channels and gutters, as recited by claims 2 and 18; the guide means mesh structures, as recited by instant claims 6 and 7; and the aperture spacing and flow rates as recited by instant claim 13. The reference does disclose a plurality of useable guide means materials (see Figs. 2, 3, 6, and 7), including the grate structure (50), which at least approximates applicant's claimed mesh structures. The reference also discloses (at col. 4, lines 21-26) that the channels and gutter means may have a plurality of configurations that would be well understood by one having ordinary skill in the art. Lastly, spacing of the liquid outlet apertures, as well as the liquid flow rates through the apparatus would have been dictated by the overall diameter and height of the contact column, as well as the process being practiced with the apparatus, and thus such would have been an obvious expedient that would have been well within the expected knowledge base of one having ordinary skill within the art. It would have been obvious for an artisan at the time of the invention, to orient the channels and gutters of Acker et al into a parallel relationship, if such were desired, since the modification from a perpendicular relationship would not materially effect the operation of the apparatus, in view of the uniform distribution capabilities of the guide means, as taught by Acker et al. Further, in view of the multiple useable materials for the guide means, as taught by Acker et al, it would have been obvious for an artisan at the time of the invention, to substitute a mesh structure of any known mesh size for the porous material, as taught by figure 7 of the reference, since such would allow for the use of the reference

apparatus with a liquid having a viscosity that would be too great for use with the porous plastic material.

Allowable Subject Matter

5. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose or suggest providing a metal mesh guide means that may be placed within and extending through the gap below the downwardly tapering region of the gutter, while being in contact with each wall of the throttling means of the gutter.

Response to Arguments

6. Applicant's arguments filed August 29, 2006 have been fully considered but they are not persuasive.

With respect to applicant's arguments directed to the alleged shortcomings of the Acker et al reference, such are not persuasive. Specifically, applicant spends an inordinate amount of ink arguing the disclosures of Figures 2-6 of Acker et al, which are not at all relied upon by the Examiner. With respect to the argument that porous guide means (52 in Fig. 7), having spaced, depending drip points at the bottom end thereof, is not an areal guide means, since according to applicant "areal" is defined as "pertaining to an area", the Examiner questions how any of the surfaces of the element (52) may exist without presenting an "area"?

With respect to the argument that the unnumbered spaced, depending points at the bottom of element (52) do not anticipate applicant's claimed "drip points", there seems to be no impeding element or disclosure that would indicate that liquid flowing through the porous element (52) would not, due to the force of gravity, flow to the lowest point (drip point) of element (52) before dripping therefrom. To argue that all of the liquid that flows downwardly through the element (52) would preferentially flow sideways out of the points, rather than dripping therefrom seems a bit incredible.

Likewise, to argue that applicant's converging sidewalls provide a throttling of liquid flow, but somehow the converging sidewalls of the Acker et al gutter means (14) do not is also an incredible revelation. Unfortunately, for applicant's position, the same laws of physics apply to the Acker et al device, as apply to applicant's device. Further, applicant's voluminous attack of the Acker et al reference based upon an alleged reliance by the Examiner of inherency within the teachings of Acker et al is misplaced at best. As explained above, the Acker et al reference teaches a structure that operates in the same manner as broadly recited by applicant's instant claims. There is no reliance upon an inherent teaching of the reference. No amount of misrepresentation of the teachings of the reference will change the fact that liquid will be throttled by the converging gap between the sidewalls of the gutter (14) and that liquid will drip from the spaced drip points of the porous element (52) when applied to the gutter (14) from the orifices (46) of the channels (44).

With respect to the argument directed to the parallel arrangement of the channels and gutters of instant claim 2, it is noted that claim 2 only requires a single channel and

a single gutter, and therefore applicant's argument that the proposed arrangement would only deliver water to a single gutter is irrelevant when only a single gutter is claimed.

With respect to the arguments directed to the fine or broad mesh gaps facilitating high or low viscosity materials, such are not persuasive since the terms fine, broad, high and low are relative terms, which do not define the structure quantitatively in the manner that applicant wishes the claims be read.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is 571 272-1153. The examiner can normally be reached on M-Th 6:30-5:00.

Art Unit: 1724

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott Bushey
Primary Examiner
Art Unit 1724


10-3-06

csb
10-3-06